UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,492	06/14/2001	Karlheinz Dorn	P97,1389 02	7912

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EXAMINER
BENGZON, GREG C

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/881,492	DORN ET AL.
	Examiner	Art Unit	
	Greg Bengzon	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9, 11-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

This application has been examined. Claims 1-9,11-17 are pending. Claim 10

has been cancelled.

Priority

This application is a continuation-in-part application of Serial No. 08/833303 filed

June 27, 1997, and claims benefits of priority from said parent application.

The effective date of the subject matter described in the claims in this application

(as presented in the amended claims submitted on August 27, 2001) is June 27, 1997.

Making Final

Applicant's arguments filed 07/12/2006 have been fully considered but they are

not persuasive.

The claim amendments regarding -- *'a single application'* -- do not overcome the

disclosure by the prior art as applied in the prior Office Action, as shown below.

The Examiner is maintaining the rejection(s) using the same grounds for

rejection and thus making this action FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9,11-17 are rejected under 35 U.S.C. 103(a) as being anticipated by

Mason et al. (US Patent 5668998), hereinafter referred to as Mason, in view of

Christensen et al. (US Patent 5881230), hereinafter referred to as Christensen.

With respect to Claim 1, Mason disclosed a medical system architecture,

comprising: a modality for acquiring images, a means for processing the images,

(Mason – Column 12 Lines 20-35) said means for processing includes a digital image

system with a computer that works according to a standard for an object association

method for data exchange between various application programs with graphical control

elements and a standard for object association controls, (Mason – Column 11 Lines 30-

45) wherein a standard for object association software component is allocated to every

individual process limited by address space boundaries;(Mason – Column 9 Lines 55-

60) including means for expanding the standard for object association software

components with a remote control component for asynchronous communication (Mason

– Column 2 Lines 35-45, Column 5 Lines 20-25) so that devices and processes can be

remote controlled without any limitations caused by address space or computer

boundaries; and a means for the transmission of the images. (Mason - Column 1 Lines

35-55, Column 2 Lines 20-35, Column 4 Lines 20-65, Column 5 Lines 1-65, Column 7

Lines 1-15, Column 7 Lines 30-45)

Mason did not disclose (re. Claim 1) a medical system architecture including

means for expanding the standard for object linking and embedding custom controls

software components. Mason did not disclose (re. Claim 1) an application based on the

MVC (Model-View-Controller) concepts.

Christensen disclosed (re. Claim 1) means for expanding the standard for object

linking and embedding custom controls software components. (Christensen - Figures

4-7B, Column 2 Lines 30-65, Column 5 Lines 45-55, Column 7 Lines 10-35, Column 9

Lines 55-65) Christensen disclosed (re. Claim 1) an application using MVC (Model-

View-Controller) concepts (as described by Applicant Specification Page 6) .

(Christensen – Column 8 Lines 30-55, Figure 7) Christensen disclosed a model tier

(database or network communication services) (Christensen-Figure 7A Item 118) , a

view tier (client computer) (Christensen-Figure 7A Item 104), and a Control tier

(business logic) (Christensen-Figure 7A Item 110).

Mason and Christensen are analogous art because they present concepts and

practices regarding association, communication, acquisition, processing, formatting and

presentation of remotely distributed objects such as digital images residing over a

variety of devices having different formatting or storage standards. It is respectfully

suggested that at the time of the invention it would have been obvious to a person of

ordinary skill in the art to implement the teachings of Christensen regarding object

linking and imbedding and remote automation into the system of Mason . The

suggested motivation for doing so would have been overcome the following limitations

the system of Mason , as described by Christensen (Christensen - Column 1 Lines 60-

65, Column 2 Lines 1-30, Column 7 Lines 10-35, Column 13 Lines 1-65): 1) allow object

references to objects on remote computers, and 2) to allow for a 3-tiered architecture

that provides the ability to support a conceptual layer of business logic between the

traditional 2-tier components of the client user interface and a server database.

Christensen explains as follows:

> There are several problems associated with the existing OLE proxy/OLE
> channel/OLE stub model to maintain an object reference for client/server object
> applications that do not share memory. The OLE channel is not capable of
> sending information between client and server processes on different computers.
> In a distributed computing environment, client and server applications are
> typically located on different computers; therefore a client application cannot
> contain an object reference to a server application running on a remote
> computer. There is also no way to maintain object identity if an object
> reference was passed from a client object application to a remote server object
> application on a remote computer since object references are not known outside
> the local computer. This limits the ability of software developers to write
> distributed object applications using existing OLE and other object oriented
> frameworks.

> The OLE proxy/OLE channel/OLE stub model also limits the ability of
> developers to create anything more than traditional two-tier client/server

applications. If a client application could contain references to more than one remote server application (i.e., on one or more remote computers), then three-tier, four-tier, and potentially N-tier client/server layering could be accomplished. Three-tier client/server object layering is desirable for many business applications (e.g., a first tier providing user services, a remote second tier providing business services, and a remote third tier providing data services).

The combination of Mason and Christensen disclosed Claim 2 - a system architecture according to claim 1, wherein said remote control component is an automation object communication interface. (Christensen - Figures 4-7B, Column 3 Lines 15-20)

The combination of Mason and Christensen disclosed Claim 3 - a system architecture according to claim 2, wherein the remote control ensues according to an automation object communication standard. (Christensen - Figures 4-7B , Column 12 Lines 55-65)

The combination of Mason and Christensen disclosed Claim 4 - a system architecture according to claim 1, wherein the remote control component is automation object communication component. (Christensen - Figures 4-7B ,Column 2 Lines 30-55, Column 7 Lines 10-35, Column 12 Lines 35-65)

The combination of Mason and Christensen disclosed Claim 5 - a system architecture according to claim 1, wherein the remote control ensues with software-IC connections. (Christensen -Column 12 Lines 35-65)

The combination of Mason and Christensen disclosed Claim 7 - a system architecture according to claim 5, wherein the remote control component is a connectable/remote interface component. (Christensen - Column 9 Lines 55-65)

The combination of Mason and Christensen disclosed Claim 9 - a system architecture according to claim 1, wherein said means for transmitting uses for data exchange the standard for object linking and embedding. (Christensen - Figures 4-7B ,Column 10 Lines 55 – 65) With respect to Claim 9, Mason disclosed a medical system architecture according to claim 1, wherein said means for transmitting uses for data exchange the standard for object association. (Mason - Column 4 Lines 20-65, Column 5 Lines 1-65)

The combination of Mason and Christensen disclosed Claim 11 - a system architecture according to claim 1, further comprising: means for use of software component technology for producing components for graphic user interfaces contained within a process. (Christensen - Column 12 Lines 1-65) With respect to Claim 11, Mason disclosed a medical system architecture according to claim 1, further comprising: means for use of software component technology for producing components for graphic user interfaces contained within a process. (Mason - Column 7 Lines 1-15)

The combination of Mason and Christensen disclosed Claim 12 - a system architecture according to claim 1, further comprising: means for combining software component technology with standard for object linking and embedding Automation for distributed propagation of an event within a control level and between the control levels. (Christensen - Column 13 Lines 1-65)

The combination of Mason and Christensen disclosed Claim 13 - a system

architecture according to claim 1, further comprising: means for combining software

component technology with software-IC connections for the distributed propagation of

an event within a control level and between the control levels. (Christensen - Column 13

Lines 1-65)

With respect to Claim 6, the combined teachings of Mason and Christensen

substantially disclosed the medical system architecture according to claim 1, wherein

the remote control ensues according to the ATOMIC standard. The Examiner notes

that Mason and Christensen have overlapping disclosures on related subject matter

regarding the ATOMIC standard, as presented below.

For the purposes of this Examination, the ATOMIC standard is interpreted by the

Examiner to mean an Asynchronous Transport Optimizing observer-pattern-like system

supporting several Modes for an Interface-Definition-Less Communication subsystem,

as described by the Applicant in US patent application 08/676859 (issued as US Patent

6275871).

The Examiner notes that the ATOMIC system is a location and protocol

transparent object oriented communication system that implicity encodes and decodes

transferred data, if the connected peers reside on hosts with different internal data

representation. (See Christensen Column 10 Lines 20-35; See Mason Column 8 Lines

1-25) In said ATOMIC system, the communication endpoints that use the same address

– a character string (also called 'pattern') – are logically connected. (See Christensen

Column 7 Lines 10-45, Column 8 Lines 45-65, Column 9 Lines 1 –40; see Mason

Column 4 Lines 20-25) The ATOMIC system supports two communication modes – an

event propagation mode (PUSH mode and PULL modes) and a classic client/server

mode using RPC. (See Christensen Column 10 Lines 50-65; See Mason Column 2

Lines 25-65, Column 6 Lines 15-25)

        The ATOMIC system uses hook routines, (supplier side and consumer side) and

macros to create a subset of data members that are to be transferred, and to effect data

conversion between both endpoints. Mason describes the use of user handlers and

provider handlers called Service Class User (SCU) and Service Class Provider (SCP),

respectively. Mason disclosed of DTInitConfig, DTUserHandler, DTServiceInterface,

DTSProviderHandler that are very similar to the ATOMIC DECLARE_MSC and

IMPLEMENT_MSC Macros. Mason disclosed of checking rules and creating element

lists for data transfer requests. (see Mason Column 6 Lines 1-10, Column 7 Lines 50-

65, Column 8 Lines 1-65, Column 9 Lines 1-65, Column 10 Lines 1-65). Christensen

describes the use of RA Proxy Object, RA Stub Object, OLE Proxy Object, and OLE

Stub Object in the context of Remote Automation applications (Christensen Figures 4-

7B). Christensen disclosed of 'marshalling' to effect data conversion, byte swapping to

conform to another CPU format, resolving local references, and handling pointers. (see

Christensen Column 10 Lines 25-45, Column 11 Lines 1-65). Christensen disclosed

that a reference thread is established to resolve all references to remote objects on the

remote server computer. The common reference thread eliminates the complicated

object lookup from multiple reference threads. (Christensen - Figure 3, Column 11 Lines

50-65)

With respect to Claim 8, the combined teachings of Mason and Christensen ,

when applied together, substantially disclose a medical system architecture according

to Claim 6, wherein the remote control component is a connectable/remote interface

component. (Christensen - Column 9 Lines 55-65, Column 10 Lines 1-65)

With respect to Claim 14-17, the combined teachings of Mason and Christensen

substantially disclosed wherein each of said three tiers are contained in various

combinations of processes. (Christensen-Figure 7a) The Examiner notes that in a

distributed object programming environment such as taught by Mason and Christensen,

the software components may be implemented in separately distinct or integrated

processes, in any combination desired.

Response to Arguments

Applicant's arguments filed 03/16/2006 have been fully considered but they are not persuasive.

The Applicant presents the following argument(s) [*in italics*]:

'The method which is applied concerns object-oriented methods (frameworks, basis classes etc.) but not components. At no point does the Mason patent refer to components...'

The Examiner respectfully disagrees with the Applicant.   Mason disclosed communication between individual software components of *a single application*. (Mason-Column 9 Lines 50-55,' *the Common Component Dispatcher (CCD)...enables use of a number of global objects that the toolkit generates'*, Column 14, Lines 15-30,' *The present invention provides a message management function comprised of several subcomponents'*

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part

of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

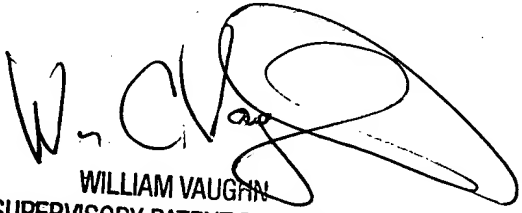**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free).

gcb

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